Idaho National Laboratory Emergency Readiness Assurance Plan — Fiscal Year 2017

September 2017



The INL is a U.S. Department of Energy National Laboratory operated by Battelle Energy Alliance

DISCLAIMER

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness, of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. References herein to any specific commercial product, process, or service by trade name, trade mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof.

Idaho National Laboratory Emergency Readiness Assurance Plan — Fiscal Year 2017

September 2017

Idaho National Laboratory Emergency Management Idaho Falls, Idaho 83415

http://www.inl.gov

Prepared for the U.S. Department of Energy Under DOE Idaho Operations Office Contract DE-AC07-05ID14517

ABSTRACT

Battelle Energy Alliance, LLC, the prime contractor for Idaho National Laboratory (INL), provides this Emergency Readiness Assurance Plan (ERAP) for Fiscal Year 2017 in accordance with DOE O 151.1C, "Comprehensive Emergency Management System." The ERAP documents the readiness of the INL Emergency Management Program using emergency response planning and preparedness activities as the basis. It describes emergency response planning and preparedness activities, and where applicable, summarizes and/or provides supporting information in tabular form for easy access to data. The ERAP also provides budget, personnel, and planning forecasts for Fiscal Year 2018.

Specifically, the ERAP assures the Department of Energy Idaho Operations Office that stated emergency capabilities at INL are sufficient to implement PLN-114, "INL Emergency Plan/RCRA Contingency Plan."

CONTENTS

ABS	ΓRACT	V
ACR	ONYMS	/iii
1.	PROGRAM DESCRIPTION	10
2.	EXTERNAL COORDINATION	12
3.	TRAINING	16
4.	EXERCISES	17
5.	EVALUATIONS, APPRAISALS, AND ASSESSMENTS	19
6.	STATUS OF CORRECTIVE ACTIONS	20
7.	RESOURCE REQUIREMENTS	20
8.	PROGRAMMATIC ISSUES	21
9.	PROGRAM GOALS AND ACHIEVEMENTS	22
Appe	ndix A DOE O 151.1D Implementation Schedule	24
Appe	ndix B Threat and Hazard Identification Risk Assessment (THIRA)	26
	PROGRAM DESCRIPTION	
Table	e 1a. Hazards Survey Status	10
Table	e 1b. Emergency Management Hazards Assessments Status.	11
Table	e 1-3. Dominant Potential Operational Emergencies.	12
Table	e 1-4. Status of Emergency Plans.	12
Table	e 1-5. Exemptions/Equivalencies	12
Table	2. Onsite/Offsite Agreements	14
Table	e 3. Emergency Management Training Summary	16
Table	4a. FY 2017 Exercises	17
Table	4b. Requirements Met in FY 2017 Exercises	18
Table	4c. Exercise Participation	18
Table	e 4d. Emergency Response Organization Activations.	18
Table	4e. Initial Response Decisions.	18
Table	4f. Offsite Notifications.	19
Table	e 4g. Planned Exercises.	19

Table 5a. Self-Assessment.	19
Table 5b. Emergency Management Evaluation, Appraisal, Assessment, and Inspection Schedule	20
Table 6a. Status of Outstanding and Overdue Corrective Actions.	20
Table 6b. Validated Corrective Actions.	20
Table 7a. Emergency Management Personnel Full-Time Equivalents.	20
Table 7b. Emergency Management Operational Budget.	20
Table 7c. Equipment Requirements.	21
Table 9a. INL EM Program achievements (goals, milestones, objectives, and status) for FY 2017	22
Table 9b. INL EM Program projections (goals, milestones) for FY 2018	23

ACRONYMS

A alert

ATR Advanced Test Reactor

BEA Battelle Energy Alliance, LLC

CFA Central Facilities Area

CY Calendar Year

CFE Cognizant Field Element
DOE Department of Energy

DOE-ID Department of Energy Idaho Operations Office

EALs emergency action levels
EAM emergency action manager
ECCs Emergency Control Centers

ED emergency director

EM emergency management

EMISIG Emergency Management Issues Special Interest Group

EOC Emergency Operations Center

EPHA emergency planning hazards assessment

EPHS emergency planning hazards survey
ERAP Emergency Readiness Assurance Plan

ERO emergency response organization

FY Fiscal Year

GE general emergency

ICS Incident Command System
INL Idaho National Laboratory

IOEM Office of Emergency Management

JIC joint information center LOAs Letters of Agreement

MFC Materials and Fuels Complex

MAAs Mutual Aid Agreements

MOAs Memoranda of Agreements

MOUs Memoranda of Understandings

N/A not applicable

NNSA National Nuclear Security Administration

OE operational emergency

REC Research and Education Campus

SAE site area emergency

SMC Specific Manufacturing Capability

THIRA Threat and Hazard Identification Risk Analysis

Idaho National Laboratory Emergency Readiness Assurance Plan — Fiscal Year 2017

1. PROGRAM DESCRIPTION

Battelle Energy Alliance, LLC (BEA), the prime contractor for Idaho National Laboratory (INL), provides this Emergency Readiness Assurance Plan (ERAP) for Fiscal Year (FY) 2017 in accordance with DOE O 151.1C, "Comprehensive Emergency Management System." The ERAP documents the readiness of the INL Emergency Management Program and assures the Department of Energy (DOE) Idaho Operations Office (DOE-ID) that stated emergency capabilities at INL are sufficient to implement PLN-114, "INL Emergency Plan/RCRA Contingency Plan."

The INL Emergency Management Program is fully matured as a hazardous material program as defined by DOE O 151.1C and continues to be an effective response program. DOE O 151.1C was added to the Prime Contract between DOE-ID and BEA, Contract No. DE-AC07-05ID14517, "Management and Operation of the Idaho National Laboratory," in July 2006. All programmatic milestones were met during FY 2017. The National Incident Management System Implementation Plan is fully implemented and being maintained in compliance with DOE O 151.1C.

INL consists of the INL Site, which is an 890-square-mile desert area 45 miles west of Idaho Falls, Idaho, and multiple facilities at the Research and Education Campus (REC) in Idaho Falls. The ERAP covers only those INL facilities operated by BEA. It does not cover facilities operated by Fluor Idaho, LLC, or the Naval Reactors Facility operated by the DOE Pittsburgh Naval Reactors Office.

Based on the results of INL emergency planning hazards surveys (EPHSs) and emergency planning hazards assessments (EPHAs), INL has established an operational emergency (OE) hazardous material program as defined by DOE O 151.1C.

INL Emergency Management develops and maintains EPHS/EPHA documents for INL facilities operated by BEA. All INL EPHSs and EPHAs are DOE O 151.1C compliant. The review cycles and DOE O 151.1C compliance status for all EPHSs and EPHAs are indicated in Table 1a and Table 1b, respectively. There are no overdue EPHS/EPHAs.

Table 1a. Hazards Survey Status.

Total Hazard Surve	5					
Total Hazards Surv	0					
Planned Actual Update (when Completion Completion Building/Facility Date Date Required years)						
ATR Complex	10/21/14	10/21/14	Yes	10/21/17	No	
CFA (includes transportation	07/17/15	07/17/15	Yes	07/17/18	No	
MFC 07/09/17 06/26/17 Yes 06/26/20						
REC	05/28/15	05/28/15	Yes	05/28/18	No	

Table 1a. (continued).

	SMC	10/16/15	10/16/15	Yes	10/16/18	No
· ·	ATR = Advanced T REC = Research ar CFA = Central Fac	nd Education Can		FC = Materials and MC = Specific Man	Fuels Complex ufacturing Capability	

The generic types of OEs that have been identified that could affect the INL are:

- Fires that cause, or could potentially cause, serious health and safety impacts to workers or members of the public
- An unplanned explosion that results in, or is suspected to result in, personnel injury
- The discovery of radioactive contamination from past DOE/National Nuclear Security Administration (NNSA) operations that may cause uncontrolled personnel exposures exceeding protective action criteria
- The release of a nonradioactive chemical where the incident commander recommends a facility evacuation or sheltering, or that requires a time-urgent response by specialist personnel
- Any natural phenomenon that may impact health and safety of personnel
- A loss of commercial power and failure of emergency generators and/or backup power supplies
 that could compromise personnel health and safety due to either release of hazardous material or
 temperature extremes
- Any unplanned criticality
- Any event that damages or compromises barriers around hazardous materials, structures, or equipment that are intended to protect the health and safety of personnel and results in suspected or confirmed personnel injury or health or degradation of health and safety, or requires personnel in nearby buildings to shelter or evacuate
- An external event involving an offsite hazardous material not associated with DOE operations where the incident commander recommends a facility evacuation or sheltering, or that requires time-urgent response by specialist personnel not normally assigned to the affected area.

Table 1b. Emergency Management Hazards Assessments Status.

Total EPHAs for S	5			
Total EPHAs overd	0			
Building/Facility	EPHA Posted on SharePoint Site			
ATR Complex	03/10/16	02/28/16	03/11/19	No
CFA (includes transportation)	07/31/15	07/31/15	07/31/18	No
MFC	11/25/15	11/25/15	11/25/18	No
REC	10/13/15	10/13/15	10/13/18	No
SMC	10/16/15	10/16/15	10/16/18	No

As indicated in the EPHSs, the OEs that could affect INL facilities are the result of radiological and

hazardous material releases. The dominant hazards at INL in terms of the most severe consequences (i.e., general emergency [GE], site area emergency [SAE], or alert [A]; biological release OEs) from potential OEs are indicated in Table 1-3. There are no biological select agents present at INL.

Table 1-3. Dominant Potential Operational Emergencies.

	Eme	rgency C	lass	Radionuclide/Chemical/
Facility	GE	SAE	A	Biological Agent/Toxin-Material
ATC Complex	X	X	X	Chemical – Chlorine, Hydrofluoric acid Radionuclide – Various
CFA (includes transportation	X	X	X	Chemical – Cyclohexelamine, Nitric acid Radionuclide – Various
MFC	X	X	X	Chemical – Sodium hydroxide Radionuclide – Various
REC				OE Unclassified
SMC		X	X	Chemical – Cyclohexelamine, Depleted Uranium Radionuclide – Various

PLN- 114 is fully mature and in a maintenance mode of operation. Annual review of PLN- 114 was completed on schedule. Table 1-4 provides the status of the BEA emergency plan.

Table 1-4. Status of Emergency Plans.

Plan or				6	Status	S	
Procedure					eq	0	Posted on
Reference		Date of	Date Due	ler iew		iew	SharePoint
Number	Title	Issue	Reviewed	Under Reviev	App	Rev Ove	Site
PLN-114	INL Emergency Plan/RCRA Contingency Plan	05/25/16	05/25/18		X		No

As specified in Table 1-5, BEA has no exemptions with DOE O 151.1C, Attachment 2, "Contractor Requirements Document."

Table 1-5. Exemptions/Equivalencies

Exemption/Waiver	Reason	Date of Submission	Approver's Name/Title and Approval Date	Duration
No exemptions requested	N/A	N/A	N/A	N/A

2. EXTERNAL COORDINATION

The INL Offsite Emergency Planning Program, established by the DOE-ID Emergency Management (EM) organization, is maintained by BEA, managed by INL EM, and administered by the INL EM public liaison. Federal, tribal, state, and local agencies participate with the INL EM public liaison in the INL Offsite Emergency Planning Program, which, through agreements, defines cooperative emergency policies and procedures. Formal documentation of participants' defined roles is recorded in federal interagency agreements, internal DOE agreements or directives, legislation and federal regulations, state regulations, and state and local emergency plans. Mutual aid agreements are documented in memoranda of understanding, memoranda of agreement, or letters of agreement. All

affected offsite agencies cited in this section have entered into mutual aid agreements with DOE-ID.

BEA, through the INL Offsite Emergency Planning Program, familiarizes local fire departments, and emergency response teams with the layout of the INL desert site and the REC, properties of hazardous material handled at the facilities, associated hazards and locations where personnel would normally work, entrances to roads inside the facilities, and possible evacuation routes. To accomplish this, INL's EM offers opportunities for offsite agencies to participate in onsite and offsite drills and exercises or conducts site walk-throughs and orientation sessions, if requested.

The INL EM public liaison also interfaces with federal, state, local, and tribal offsite agencies and/or jurisdictions by:

- Meeting with federal, state, local, and tribal offsite agency and/or jurisdiction representatives, as needed, and ensuring that areas of concern and revisions to emergency response procedures are discussed, as appropriate
- Meeting with various state agencies, as needed, to discuss topics such as development/revision of emergency plans and procedures, emergency action levels (EALs), and agreements, response capabilities, areas of expertise, assignment of responsibility, and other concerns
- Attending scheduled meetings of county and regional local emergency planning committees to discuss development/revisions of emergency plans and procedures and EALs, response capabilities, areas of expertise, assignment of responsibility, and other concerns.

The INL EM public liaison can also arrange for offsite agencies and/or jurisdictions, including hospitals, to receive a copy of the INL Emergency Plan/Resource Conservation and Recovery Act Contingency Plan to provide information on INL and REC emergencies during disasters.

If requested, BEA conducts orientation sessions for hospital personnel to familiarize them with the properties of hazardous material handled at the facilities and the types of injuries or illnesses that might occur from fires, explosions, or releases of hazardous material. If requested, the BEA fire marshal provides a chemical inventory of hazardous chemicals and associated material safety data sheets to the Office of Emergency Management (IOEM) and other agencies.

Table 2 lists current Memoranda of Understandings (MOUs), Memoranda of Agreements (MOAs), Mutual Aid Agreements (MAAs), and/or Letters of Agreement (LOAs) directly related to INL EM, Emergency Response, and Law Enforcement.

Table 2. Onsite/Offsite Agreements

Γable 2. Onsite/Offsite Agreements	Data of		Data of	Data of
MOU/MOA/MAA/LOA	Date of Agreement	Expiration	Date of Review	Date of Renewal
Memorandum of Understanding Between the State of Idaho and U.S. Department of Energy Idaho Operations Office – Radiological Assistance Response for DOE and/or non-DOE Incidents In Public Access Areas	01/07/94	Review at request of either party		
Memorandum of Understanding Between U.S. Department of Energy Idaho Operation Office and The State of Idaho For Emergency Preparedness	10/20/15		10/20	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Bingham County Sheriff's Office	03/25/15		10/20	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Bonneville County Sheriff's Office	10/02/14		10/19	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Bonneville County Sheriff's Office (Bomb dog agreement)	10/02/14	Through the useful life of the canine		
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Butte County Sheriff's Office	03/09/15		03/20	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Clark County Sheriff's Office	07/30/14		07/19	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and the Jefferson County Sheriff's Office	12/02/14		12/19	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and City of Idaho Falls, Police Department (Bomb dog agreement)	08/19/08	Through the useful life of the canine		
Memorandum made this 4 th day of September, 2007 between United States Department of Energy Idaho Operations Office (DOE-ID) and the City of Idaho Falls, Idaho Police Department (IFPD)	09/05/07	Not identified	None specified	

Table 2. (continued).

Table 2. (continued).	T			
MOU/MOA/MAA/LOA	Date of Agreement	Expiration	Date of Review	Date of Renewal
Memorandum of Understanding By and	8			
Between United States Department of Energy Idaho Operations Office and Bingham County Emergency Management Services	07/30/14		07/19	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Bonneville	01/15/15		01/19	
County Emergency Management Services				
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Butte County Emergency Services	07/25/11		07/16	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Clark County Civil Defense	01/21/15		01/19	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Jefferson County Emergency Management	01/26/15		10/20	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Portneuf Medical Center	10/27/09		10/14	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Eastern Idaho Regional Medical Center	05/16/12		05/21	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and Bingham Memorial Hospital	01/12/16		12/21	
Agreement-In-Principle Between the Shoshone-Bannock Tribes and The United States Department of Energy	12/18/12		12/17	
Interagency Agreement Between Bureau of Land Management and INL Fire Department	06/20/13		5/18	
Annual Operating Plan for Mutual Fire Aid 2017 Between Department of Energy Idaho Operations Office, Idaho National Laboratory and Idaho Falls District Bureau of Land Management	06/26/17		5/18	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and The Idaho Transportation Department	12/05/12		12/17	

Table 2. (continued).

Table 2. (continued).				1
MOU/MOA/MAA/LOA	Date of Agreement	Expiration	Date of Review	Date of Renewal
Environmental Oversight and Monitoring Agreement (Agreement in Principle) Between the United States Department of Energy and The State of Idaho	08/31/15		8/20	
Southeastern Idaho Reciprocal Assistance Agreement and Operations Plan between City of American Falls Fire Department, Ammon Fire Department, Arco Fire Department, Central Fire District, Chubbuck Fire Department, U. S. Department of Energy Idaho Operations Office, Firth Fire District, Fort Hall Fire District, Idaho National Laboratory Fire Department, Lost River Fire District, Madison Fire Department, Pocatello Fire Department, Shelley Fire District, South Custer Fire District, Swan Valley Fire Department, Teton County Fire Department, Ucon Fire Department	07/26/17		5/22	
Memorandum of Understanding By and Between United States Department of Energy Idaho Operations Office and City of Idaho Falls Fire Department - Reciprocal Fire Fighting Assistance Agreement	02/23/17		2/22	
Memorandum of Agreement Between the Naval Reactors Laboratory Field Office and the Idaho Operations Office	11/7/12		None specified	

3. TRAINING

Table 3 provides the total number and percent of emergency response organization (ERO) members trained as a team in FY 2017.

Table 3. Emergency Management Training Summary

Functional Area (i.e., Incident Command, EOC, ECC, JIC, etc.)	Type of Personnel (EOC, Monitoring Teams, Fire, Medical, etc.)	Total Number Requiring Training	Percent Trained
JIC	Contractor personnel	29	100%
EOC	Contractor personnel	76	100%
ATR Complex ECC	Contractor personnel	52	100%
CFA ECC	Contractor personnel	60	100%
MFC ECC	Contractor personnel	44	100%
SMC ECC	Contractor personnel	23	100%

4. EXERCISES

On November 9, 2016, a successful evaluated exercise was conducted at INL. The participating EROs were activated and responded to their duty station in a timely and effective manner. They utilized applicable procedures and checklists to efficiently respond to and mitigate the event. The emergency control centers (ECCs), emergency operations center (EOC), and joint information center (JIC) were declared operational when staffing levels were met. Each emergency action manager (EAM) and emergency director (ED) correctly identified applicable EALs and declared an OE within the time requirements. Offsite notifications were completed within the required time limits. The ED recognized the event as a multi-facility event and assumed responsibility for categorization/ classification, notifications, and protective actions/protective action recommendations. As event conditions changed, the classification was effectively upgraded as new EALs were met. Good communications were demonstrated within and in between each of the activated ECCs, EOC control cells, DOE-ID, and Idaho State oversite representative.

Protective actions and protective action recommendations were determined and implemented at ATR Complex. This led to a total evacuation of the ATR Complex. Accountability was completed and personnel successfully loaded onto the evacuation buses. Pro Force personnel responded and established access control to the ATR facility.

Facility monitoring teams and site monitoring teams were deployed and monitoring data relayed to their respective coordinators to be utilized in response actions and consequence assessment activities.

Throughout this exercise, ERO personnel were very proactive, thinking ahead, and demonstrating effective communication techniques. Effective command and control was successfully demonstrated during the exercise, which included effectively coordinating response actions between facilities.

During the drill, 12 of the 16 standardized INL objectives were evaluated using the appropriate demonstration criteria. All 12 objectives were rated satisfactory or satisfactory with improvement needed.

Table 4a. FY 2017 Exercises

Total Site Exercises and Drills					6	
Exercise Date	THIRA Category	Type of Event and/or Hazard to be Simulated	Impacted Facility	HSEEP Type	Date of AAR	External Assessment
10/12/16	N/A	Multiple (Wildland Fire, Helo crash, Hazmat, Injuries)	SMC	Evaluated Drill	11/01/17	No
11/09/16	N/A	Earthquake/ Canal Drain	ATR Complex	Full Scale Exercise	12/15/16	No
05/23/17	N/A	Loss of Power / Radiological Release	MFC	Evaluated Drill	06/27/17	No

06/27/17	N/A	Natural Phenomena with Injuries	CFA	Evaluated Drill	8//17	No
09/20/17	N/A	Explosion with Hazmat	SMC	Full Scale Exercise	None	No
05/23/18	N/A	Natural Phenomena with Rad Release	MFC	Full Scale Exercise	None	No

Table 4b indicates if the following requirements have been met.

Table 4b. Requirements Met in FY 2017 Exercises

Requirement	Yes/No
Severe event scenario within past five years	Yes
All program elements tested within past five years	Yes
Scenarios rotated among hazardous material facilities within 5 years	Yes
Offsite participation requested within past 3 years	Yes
Radiological response asset participation requested within past 3 years.	Yes

Table 4c shows the percentage of the categories of ERO personnel that participated in the FY 2017 evaluated drills, exercise, and actual events.

Table 4c. Exercise Participation.

Category	Drill	Exercise	Actual Event
Senior Contractors	100%	100%	N/A
Contractors	100%	100%	N/A

Table 4d lists the total activations of the ERO for OEs (actual and evaluated drills/exercises), as well as the total number of activations that did not meet the time goals for activation and achieving minimum staffing (based on the site's implemented emergency plans/procedures).

Table 4d. Emergency Response Organization Activations.

Total number of ERO Activations	4
Total number of ERO activations not within time standard	0

Table 4e lists the total number of OEs (actual and evaluated drills/exercises) requiring a prompt initial response decision (i.e., event categorization/classification) and the total number of prompt initial response decisions that did not meet the time goals required by DOE O 151.1C.

Table 4e Initial Response Decisions

Two to the minute response 2 originals.	
Total number of prompt initial response decisions	4
Total number of prompt initial response decisions not within time standard	0

Table 4f lists the total number of required notifications of OEs (actual and evaluated drills/exercises) to offsite authorities and the total number of notifications that did not meet the time goals required by DOE O 151.1C.

Table 4f. Offsite Notifications.

Total number of prompt initial response decisions	4
Total number of prompt initial response decisions not within time standard	1

The BEA exercises planned for FY 2018 are listed in Table 4g.

Table 4g. Planned Exercises.

Tuble 1g. Flatified Excluses.					
Total Site Exercises and Drills					4
Projected/ Scheduled Date (MM/DD/YY)	THIRA Category	Type of Event and/or Hazard to be Simulated	Impacted Facility	HSEEP Type	HQs Support Desired
10/24/17	NA	Rad Release	ATR Complex	Evaluated Drill	None
05/23/18	NA	Natural Phenomena with Rad Release	MFC	Full Scale Exercise	None
07/18	NA	Unknown	CFA	Evaluated Drill	None
09/18	NA	Unknown	SMC	Evaluated Drill	None

5. EVALUATIONS, APPRAISALS, AND ASSESSMENTS

An EM assessment was conducted in FY 2017. The assessment team determined the overall performance rating of the INL EM Program is "effective." The INL EM Program is mature and successful, demonstrating improvement by implementation of identified opportunities for improvement and implementation of DOE complex-wide lessons learned and compliance issues. The program is documented, compliant, and understood. It generally meets expectations and has minor issues, but no violations of DOE O 151.1C or other requirements.

Based on assessment results, the assessment team identified 5 findings and 11 opportunities for improvement. These issues do not impact the overall effectiveness of the INL EM Program and do not impact safety, reliability, or regulatory commitment. Issues are documented in the INL LabWay tracking system.

Table 5a lists the total number of planned program element self-assessments and the total number of overdue internal program element self-assessments.

Table 5a. Self-Assessment.

Total number of planned program element self-assessments	1
Total number of overdue program element self-assessments	0

Scheduled evaluations, assessments, and self-assessments for FY 2018 are identified in Table 5b.

Table 5b. Emergency Management Evaluation, Appraisal, Assessment, and Inspection Schedule.

FY/Quarter	Activity	Conducting Organization	Program Element(s) Assessed
FY 2018/Q2	Self-Assessment	Contractor	All
FY 2018/Q3	Contractor Oversight Assessment	Field Office	All

6. STATUS OF CORRECTIVE ACTIONS

Table 6a provides the status of outstanding and overdue emergency management corrective actions identified in response to findings assessed by oversight organizations (e.g., GAO, IG, EA, DNFSB, CDNS) external to your program.

Table 6a. Status of Outstanding and Overdue Corrective Actions.

Corrective Action (Issue #/Title)	Status	Original Due Date	Projected Completion
LP-GA 2017-0080, GDE-467, "Drills and Exercises" Issuance	Updating procedure	N/A	02/01/2018

The number of closed corrective actions that have been reviewed by the Cognizant Field Element (CFE) and the total number of closed corrective actions that were reviewed and found inadequate (ineffective, incomplete, unacceptable) by the CFE are identified in Table 6b.

Table 6b. Validated Corrective Actions.

Total number of closed corrective actions reviewed by the CFE	1
Total number of closed corrective actions reviewed and found inadequate by the CFE	0

7. RESOURCE REQUIREMENTS

Table 7a provides the total number of full-/part-time Site/facility personnel required for FY 2017 and estimated for FY 2018 for contractor staff.

Table 7a. Emergency Management Personnel Full-Time Equivalents.

Organization	FY 2017	FY 2018
Battelle Energy Alliance, LLC (BEA)	19	19
Total	19	19
Explanation: N/A		

INL EM is fully funded. Table 7b summarizes the INL EM Program operational budget.

Table 7b. Emergency Management Operational Budget.

Organization	FY 2017	FY 2018
Battelle Energy Alliance, LLC (BEA)	\$2,699,375	\$2,885,0581
Explanation: Increase in average charge out rates		

Table 7c lists equipment requirements that are not included in the operational budget.

Table 7c. Equipment Requirements.

Item	FY 2017	FY 2018
N/A	0	0

8. PROGRAMMATIC ISSUES

Over the past 18 months, INL EM staff have been in discussions regarding the implementation impacts of the new order, DOE Order 151.1D, "Comprehensive Emergency Management System," with DOE-ID counterparts. As information was released on the new order, EM provided pushback on requirements and changes found to be unreasonable or not needed. In addition, two EM staff attended several face-to-face meetings with DOE-HQ to work on key issues. Some of our efforts were successful, such as the basic elimination of the Globally Harmonized System (GHS) effort from the order and a significant lowering of requirements in the area of Threat and Hazard Identification/Risk Assessment (THIRA) requirements. If not reduced these efforts would have caused much more than a significant impact to our organization. EM was not as successful in pushback and change in other areas of the order. The INL EM manager has had many meetings with the DOE customers. In these meetings, both INL EM and Flour Idaho, LLC emergency management expressed great concerns for implementation of this order. The lack of guidance (e.g., DOE Guides) and inconsistent interpretation of the order left us in a quandary.

The main topics of concern include the following:

- Implementation
- ERO training
- Protective actions
- Notifications and communications
- Readiness assurance
- Emergency categorization and emergency classification and response
- Emergency response organization professionals
- THIR A
- Global Harmonization Issues.

Although these and other issues have been pushed to our local and national DOE representatives, the INL EM group has seen little to no relief.

9. PROGRAM GOALS AND ACHIEVEMENTS

Table 9a compares actual INL EM Program achievements accomplished during FY 2017 to projected goals, milestones, and objectives.

Table 9a. INL EM Program achievements (goals, milestones, objectives, and status) for FY 2017.

Fiscal Year 2017 Goal	Milestones	Objective	Status
Conduct annual FY 2017 sitewide exercise	Exercise final plan approved — at least 30 days prior to exercise Exercise conducted — date undetermined Exercise report submitted — within 45 days following exercise	Successfully accomplish exercise objectives and submit report	Successfully accomplished exercise objectives and submitted report.
Conduct annual review of EPHSs, and revise, if necessary		Review EPHSs and revise, if necessary, by end of calendar year (CY) 2017	All EPHS reviews completed as scheduled
Conduct annual review of EPHAs, and revise, if necessary		Review EPHAs and revise, if necessary, by end of CY 2017	All EPHA reviews completed as scheduled
Complete annual review of PLN-114 and revise, if necessary		Review PLN-114 and revise, if necessary, by end of FY 2017	Reviewed PLN-114 and revised
Conduct initial training for new ERO members	Classes conducted, as needed	Conduct initial training for all new ERO members	Completed initial training for all new ERO members
Conduct annual ERO requalification training for CY 2017		Complete annual ERO requalification training for CY 2017	Complete annual ERO requalification training for CY 2017
Complete ERAP for FY 2017		Complete FY 2017 ERAP	FY 2017 ERAP scheduled for completion by September 30, 2017
Conduct annual facility evaluated drills		Successfully conduct facility evaluated drills	Drills successfully conducted or are scheduled as per the approved drill schedule
EM Technology improvement initiative			Developed Five-Year Strategic Equipment Plan
EM Training program initiative			Updated and issued training procedure
EM Incident Command			Developed path

Table 9b. (continued).

Fiscal Year 2017 Goal	Milestones	Objective	Status
System (ICS) implementation initiative			forward for implementation

Table 9b describes the INL EM Program goals and milestones for FY 2018.

Table 9b. INL EM Program projections (goals, milestones) for FY 2018.

Goal	Milestones	Objective
Conduct annual FY 2018 sitewide exercise	Exercise final plan approved — at least 30 days prior to exercise Exercise conducted — date undetermined Exercise report submitted — within 45 days following exercise	Successfully accomplish exercise objectives and submit report
Conduct annual review of EPHSs, and revise, if necessary		Review EPHSs and revise, if necessary, by end of CY 2018
Conduct annual review of EPHAs, and revise, if necessary		Review EPHAs and revise, if necessary, by end of CY 2018
Complete annual review of PLN-114 and revise, if necessary		Review PLN-114 and revise, if necessary, by end of FY 2018
Conduct initial training for new ERO members	Classes conducted, as needed	Conduct initial training for all new ERO members
Conduct annual ERO requalification training for CY-2018		Complete annual ERO requalification training for CY 2018
Complete ERAP for FY 2018		Complete FY 2018 ERAP
Conduct annual facility evaluated drills		Successfully conduct facility evaluated drills
EM Technology improvement initiative		Develop Five-Year Strategic Equipment Plan
EM Training program initiative		Update and issue training procedure
EM ICS implementation initiative		Continue to develop path forward for implementation

Appendix A DOE O 151.1D Implementation Schedule

Phased implementation of DOE O 151.1D will begin immediately following receipt of the DOE guide. However, initiation of all aspects of this implementation plan will require up to five (5) years from the date the guide is provided to BEA.

INTENTIONALLY LEFT BLANK.

Appendix B Threat and Hazard Identification Risk Assessment (THIRA)

A team of representatives from BEA, Fluor-Idaho, and DOE-ID has been established and will coordinate efforts for developing INL's THIRA. The Emergency Management Issues Special Interest Group (EMISIG), in conjunction with DOE Headquarters, has developed a standard process for sites to use in THIRA development. The team will follow this process.